

Creating cures and prosperity

How the KU Cancer Center creates healthy communities and drives the Kansas economy



The University of Kansas Cancer Center is working toward a world without cancer. In addition to conducting research and providing outstanding patient care for Kansans, the cancer center creates jobs and prosperity for our state. Few other initiatives have as much potential to simultaneously drive public health and economic development benefits.

Growing the economy

The cancer center's pursuit of National Cancer Institute designation continues to produce huge economic benefits for Kansas. Since 2007, NCI investments have created \$930 million in economic activity and 1,830 jobs. Through 2016, those figures grow to \$2.02 billion and 2,559 jobs.

The cancer center's economic benefits extend statewide, thanks to the center's role in the Midwest Cancer Alliance, a network of 20 hospitals and healthcare organizations throughout Kansas and western Missouri.

Leveraging state investments

The State of Kansas and the Legislature have been key supporters of the pursuit of NCI designation since 2007. The state investment of \$5 million annually was the "first money in" and enabled the cancer center to recruit and support leaders like Dr. Roy Jensen, build the Midwest Cancer Alliance and support the cancer clinical trials office.

Since 2007, the cancer center has leveraged the state investment into \$475 million in total contributions — a 13-to-1 return on the state investment.

Securing external research funds

One reason the cancer center is a great return on investment for Kansas is because it attracts external research funds, often from federal agencies. In 2012, the center's NCI grant funding grew 34 percent to \$13.9 million, with total extramural funding reaching \$56 million.

Turning discoveries into startup companies

Cancer center researchers have created the following five companies:

Cancer Survivorship Training Inc. provides online and mobile resources and education to health care professionals to help them better treat and advise cancer survivors. The company was launched by KU researcher Jennifer Klemp. Visit www.cancersurvivorshiptraining.com.

\$2.02B

Economic benefit from 2007-2016,
including \$930M so far

2,559

New jobs from 2007-2016,
including 1,830 so far

13-to-1

Investment leveraged per dollar
from the Kansas Legislature and
Department of Commerce

\$56M

Extramural research funding for the
cancer center in 2012

5

Startup companies created by
cancer center-affiliated researchers

20

Hospitals and organizations in the
Midwest Cancer Alliance

27

The cancer center's U.S. News &
World Report ranking, up 10
places from the previous year.

CritiTech makes nanoparticles of existing drugs to enhance their delivery and effectiveness. The company has a cancer drug called Nanotax in Phase I human clinical trials. KU researchers Val Stella, Bala Subramaniam and Katherine Roby are actively engaged in the company. Visit www.crititech.com.

CyDex Pharmaceuticals is best known for Captisol, a compound that binds with pharmaceutical products to improve stability and solubility. CyDex was acquired by Ligand Pharmaceuticals in 2011, resulting in a new Ligand office in Lawrence. CyDex was founded by KU researcher Val Stella. Visit www.ligand.com/cydex.

Savara Pharmaceuticals is a specialty pharmaceutical company developing pulmonary drugs for the treatment of serious and life-threatening conditions. In 2012, the company announced that it had raised \$8.6 million in the first closing of a Series B round of financing. The company was based off technologies developed by KU researcher Cory Berkland. Visit <http://savarapharma.com>.

HylaPharm is producing technology that delivers chemotherapy drugs directly to cancer cells in tumors and nearby lymph nodes while limiting drug exposure in kidneys, nerves and auditory organs. Limiting exposure in these surrounding areas enables targeted treatments with fewer side effects. Visit www.hylapharm.com.

Overall, there are 24 active startup companies created from KU research, many of which are connected to the cancer center through the KU School of Pharmacy and KU Medical Center.

Providing patient care, access to clinical trials

In addition to economic benefits, NCI designation for the KU Cancer Center means Kansans don't have to travel out of state to find the most advanced cancer care and clinical trials. Put simply — it means life-changing care, closer to home.

In the past year, the number of clinical trials in the cancer center's portfolio increased 40 percent. Of those trials, the number of new clinical trials sponsored by pharmaceutical companies has increased from 18 to 42 – or 230 percent – over the same period.

40%

Increase in **clinical trials** in our portfolio from 2012 to 2013.

230%

Increase in new clinical trials sponsored by pharmaceutical companies from 2012 to 2013.

What comes next?

Kansans deserve access to advanced care, closer to home. That's why the KU Cancer Center's achieving National Cancer Institute designation in 2012 was such an important accomplishment. The quest for this designation took nearly a decade, with the cancer center benefitting from unprecedented support from individuals, policymakers, businesses and communities throughout the region.

Now we must focus on our ultimate goal: achieving Comprehensive Cancer Center status, which would produce additional economic benefits and healthcare access for Kansas. Achieving this highest level of designation requires additional depth of research activities in three areas: basic laboratory, clinical and prevention, control and population-based research. Designated centers must also conduct substantial interdisciplinary research that bridges these scientific areas and demonstrate effectiveness in serving their catchment area, as well as the broader population, through the cancer research they support. In other words, **our research efforts must be wider, deeper and larger**. State support is essential to these efforts.